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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,078	01/18/2006	Yasushi Inagaki	283042US90PCT	3699
22850	7590	03/25/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER KALAM, ABUL	
			ART UNIT 2814	PAPER NUMBER
			NOTIFICATION DATE 03/25/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/565,078

Applicant(s)

INAGAKI ET AL.

Examiner

Abul Kalam

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 9-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-824)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 2/6/08, 4/17/06, 1/18/06

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species I, with claims 1-8 reading on the elected species, in the reply filed on January 5, 2009, is acknowledged. The traversal is on the ground(s) that PTO has not carried its burden of proof to establish distinctness and all the claims in the present application would not place a serious burden on the Examiner. This is not found persuasive because the instant application is a national stage entry of PCT/JP05/01610, and as such, PCT Rules 13.1 and 13.2 are applicable. Note that Rule 13.1 states: "The international application shall relate to one invention only or to a group of inventions so lined as to form a single general inventive concept." Furthermore, Rule 13.2 states: "Where a group of inventions is claimed in one and the same international application, the requirement of unity of invention referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features." Applicant argues that all claims are directed to multilayer printed wiring boards. Note that multilayer printed wiring boards are not considered a "special technical feature" that defines a contribution over the prior art. Regarding the burden placed on the examiner, note that there is an examination and search burden because the species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely

to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation of "the power source conductive layers," in line 5 of claim 1 and line 2 of claims 2, 4, 6 and 7, is indefinite and unclear because there is no antecedent basis for the claimed limitation. What power source conductive layers is the Applicant referring to?

The limitation of "the grounding conductive layers," in line 6 of claim 1, line 2 of claim 3, line 2 of claim 5, line 5 of claim 6 and line 5 of claim 7, is indefinite and unclear because there is no antecedent basis for the claimed limitation. What grounding conductive layers is the Applicant referring to?

The limitation of "the conductive layer on the interlayer insulation layer," in line 7 of claim 1 and line 3 of claims 2-7, is indefinite and unclear because there is no antecedent basis for the claimed limitation. What conductive layer is the Applicant referring to?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8, as best understood by the Office, are rejected under 35 U.S.C. 102(b) as being anticipated by En et al. (EP 1117283).

Regarding claim 1, En discloses a multilayer printed wiring board (**Figs. 17-21**) in which an interlayer insulation layer (**3050, Fig. 19**) and a conductive layer (**3033, Fig. 17**) are formed on a multilayer core substrate (**3030A, Fig. 17**) composed of front and rear conductive layers (**3031**) and at least a conductive layer (**layer formed in vias 3036**) as an inner layer and electric connection is performed through via holes (**3036**), at least one of the sum of the thicknesses of the power source conductive layers (**layers 3034 above and below substrate 3030, Fig. 17D; 36 μ m, ¶ [0478]**) in said multilayer core substrate and the sum of the thicknesses (**36 μ m, ¶ [0478]**) of the grounding conductive layers (**layers 3034 above and below substrate 3030, Fig. 17D; 36 μ m, ¶ [0478]**) is larger than the thickness of the conductive layer (**3056, Fig. 20P; 18 μ m, ¶[0485]**) on the interlayer insulation layer (**3050**).

Regarding claims 2-7, En discloses the multilayer printed wiring board according to claim 1 wherein assuming that the sum of the thicknesses of the power source conductive layers (**layers 3034 above and below substrate 3030, Fig. 17D**) in said

multilayer core substrate is α_1 (36 μm , ¶ [0478]) and the thickness of the conductive layer (3056, Fig. 20P) on the interlayer insulation layer (3050) is α_2 (18 μm , ¶[0485]), the relation between α_1 and α_2 is $1.2\alpha_2 < \alpha_1 < 40\alpha_2$ and assuming that the sum of the thicknesses of the grounding conductive layers (layers 3034 above and below substrate 3030, Fig. 17D) in said multilayer core substrate is α_3 (36 μm , ¶ [0478]), the relation between α_3 and α_2 is $1.2\alpha_2 < \alpha_3 < 40\alpha_2$.

Regarding claim 8, En discloses the multilayer printed wiring board according to claim 1 wherein the thickness of the conductive layer (3031; 3 μm , ¶ [0481]) on the front and rear surfaces of said multilayer core substrate (3030, Fig. 17) is smaller than the thickness of the conductive layer of the inner layer (conductive layer formed in vias 3036).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abul Kalam whose telephone number is (571)272-8346. The examiner can normally be reached on Monday - Friday, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. K./
Examiner, Art Unit 2814

/Phat X. Cao/
Primary Examiner, Art Unit 2814